

## Rabbit anti-Human MTHFD1 Polyclonal Antibody | anti-MTHFD1 antibody

Anti-MTHFD1 Antibody, Rabbit Polyclonal

| CATALOG # | HOST   | REACTIVITY | APPLICATIONS                                                  |
|-----------|--------|------------|---------------------------------------------------------------|
| AAA254779 | Rabbit | Human      | Immunofluorescence, Immunocytochemistry, Immunohistochemistry |

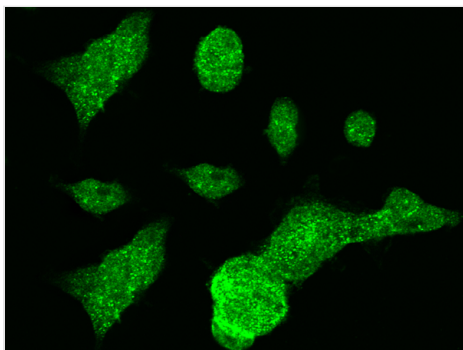
### PRODUCT SYNONYMS

MTHFD1; Polyclonal Antibody; Anti-MTHFD1 Antibody; Rabbit Polyclonal; MTHFD1 Antibody; Rabbit PAb; Antigen Affinity Purified; anti-MTHFD1 antibody

### PRODUCT SPECIFICATIONS

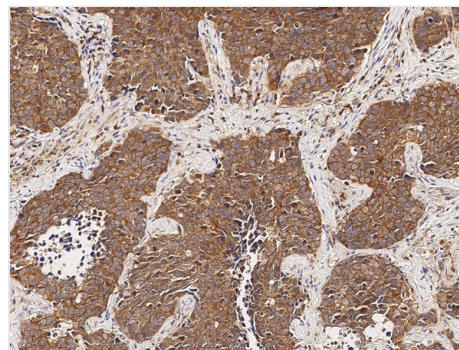
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|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                             | Rabbit                                                                                                                                                                                                                                                                |
| Reactivity                                       | Human                                                                                                                                                                                                                                                                 |
| Clonality                                        | Polyclonal                                                                                                                                                                                                                                                            |
| Isotype                                          | Rabbit IgG                                                                                                                                                                                                                                                            |
| Specificity                                      | Human MTHFD1                                                                                                                                                                                                                                                          |
| Purity/Purification                              | Protein A & Antigen Affinity                                                                                                                                                                                                                                          |
| Form/Format                                      | Liquid; 0.2um filtered solution in PBS                                                                                                                                                                                                                                |
| Applicable Applications for anti-MTHFD1 antibody | IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry)                                                                                                                                                                                        |
| Immunogen                                        | A synthetic peptide corresponding to the N-terminus of the Human MTHFD1                                                                                                                                                                                               |
| Conjugation                                      | Unconjugated                                                                                                                                                                                                                                                          |
| Preparation                                      | Produced in rabbits immunized with a synthetic peptide corresponding to the N-terminus of the Human MTHFD1, and purified by antigen affinity chromatography.                                                                                                          |
| Preparation and Storage                          | This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles. |

### IMAGES



#### IF (Immunofluorescence)

Immunofluorescence staining of MTHFD1 in 293 cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-Human MTHFD1 polyclonal antibody (dilution ratio 1:1000) at 4 degree C overnight. Then cells were stained with the Alexa Fluor 488-conjugated Goat Anti-rabbit IgG secondary antibody (green). Positive staining was localized to cytoplasm.



#### IHC (Immunohistochemistry)

Immunochemical staining of human MTHFD1 in human lung cancer with rabbit polyclonal antibody (1:1000, formalin-fixed paraffin embedded sections).

ADDITIONAL INFORMATION

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-MTHFD1 antibody | The methylenetetrahydrofolate dehydrogenase (MTHFD1) gene, as one of the key genes involved in the folate pathway, has been reported to play a critical role in the pathogenesis of neural tube defects (NTDs). Methylenetetrahydrofolate dehydrogenase (MTHFD1) deficiency has recently been reported to cause a folate-responsive syndrome displaying a phenotype that includes megaloblastic anemia and severe combined immunodeficiency. Methylenetetrahydrofolate dehydrogenase (MTHFD1) catalyzes three sequential reactions that metabolize derivatives of tetrahydrofolate (THF) in folate-dependent one-carbon metabolism. Impaired MTHFD1 flux has been linked to disturbed lipid metabolism and oxidative stress. |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 222136639                                                                                                                                                                                                                                 |
| NCBI GeneID                      | 4522                                                                                                                                                                                                                                      |
| NCBI Accession #                 | NP_005947.3                                                                                                                                                                                                                               |
| NCBI GenBank Nucleotide #        | NM_005956.3                                                                                                                                                                                                                               |
| UniProt Accession #              | P11586; Q86VC9; Q9BVP5; B2R5Y2; G3V2B8                                                                                                                                                                                                    |
| Molecular Weight                 | 101,559 Da                                                                                                                                                                                                                                |
| NCBI Official Full Name          | C-1-tetrahydrofolate synthase, cytoplasmic                                                                                                                                                                                                |
| NCBI Official Synonym Full Names | methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase                                                                                                   |
| NCBI Official Symbol             | MTHFD1                                                                                                                                                                                                                                    |
| NCBI Official Synonym Symbols    | MTHFC; MTHFD                                                                                                                                                                                                                              |
| NCBI Protein Information         | C-1-tetrahydrofolate synthase, cytoplasmic; C1-THF synthase; cytoplasmic C-1-tetrahydrofolate synthase; 5,10-methylenetetrahydrofolate dehydrogenase, 5,10-methylenetetrahydrofolate cyclohydrolase, 10-formyltetrahydrofolate synthetase |
| UniProt Protein Name             | C-1-tetrahydrofolate synthase, cytoplasmic                                                                                                                                                                                                |
| UniProt Gene Name                | MTHFD1                                                                                                                                                                                                                                    |
| UniProt Synonym Gene Names       | MTHFC; MTHFD; C1-THF synthase                                                                                                                                                                                                             |
| UniProt Entry Name               | C1TC_HUMAN                                                                                                                                                                                                                                |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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